

12/31/10

0115 START Beer onsite, meet with EPA
OSC Jeff Lippert. Mercury spill
located in residential home located
at Non-Responsive Canterbury Rd, Ann Arbor
MI. Home owner placed plastic over
the mercury and shut off furnace.
Family members left home.

- > Warm up Lumex, RFW 25027
- R% = 4-6. Background outside = 16 $\mu\text{g}/\text{m}^3$

0125 ERRS onsite. Environmental Restoration

0135 OSC Lippert and START Beer enter
house to screen with Lumex

- > At entrance to home = 2000 (BZ)
- > Above entertainment center = 2075 (BZ)
- > Above spill = 20,000 + } measured
- > Above spill = 7750 (BZ) } with plastic removed.

0155 Depart residence.

Mercury source from weights removed
from an antique grandfather clock. (2)
Weight fell over on top cabinet and
spilled contents onto the floor (carpet)
and down a heat register. One weight
is still intact with ~ 80z of mercury
inside

0200 ERRS begins set up to remove spill.

- > exhaust fans place at front and
rear of home

- > Prep to use Merc-vac, begin vac

0230 Screen furnace with Lumex, remove
furnace filter and place Lumex nozzle
in ductwork, measure 45,950 $\mu\text{g}/\text{m}^3$

- > Kitchen BZ = 1650
- > Bedrooms BZ = 1500 - 2200
- > Outside home near vent fans = 25 - 389

0300 ERRS completes preliminary merc-
vac operations and begins bagging
items from the family room, surrounding
the spill area.

0355 ERS begin removing mercury contain-
ated carpet from family room.

0415 Begin screening bagged material

Bag #1 = 2350 - Cable box

#2 = 48100 - Blanket, clothes

#3 = 6563 - Pillows

#4 = 126 - Pillow, clothes

#5 = 11540 - TV cables

#6 = 377 - VCR

#7 = 1046 - shoes

Vacuum cleaner = 28

0430 Screen house with Lumex

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Kitchen BZ = 221

Furnace Duct = 25,930 (in Kitchen)

Bathroom BZ = 210

Bedrooms BZ = 225-315

TV in bag = 13,340

Family Room BZ = 107

0445 ERRS completes merc-vac operation for the first round, believe they have recovered nearly all that was spilled. Heat duct is encased in the concrete slab no way to access.

> ERRS take photo inside duct and can see additional beads of mercury and decide to continue merc-vac operation, pushing the vac hose down the duct.

0500 Screen TV cabinet = 3231

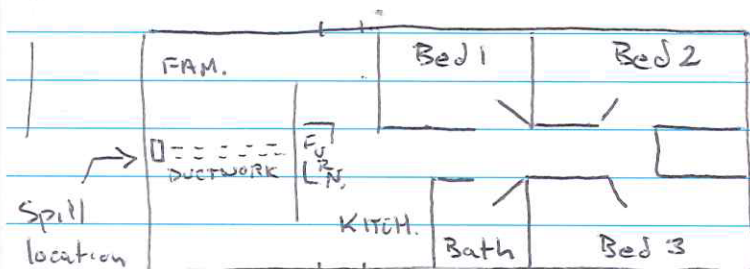
0535 ERRS continue to vac the ductwork and use a camera as guidance to beads, progress continues.

0545 Screen Furnace Duct in kitchen = 775

0620 ERRS continues to attempt to remove mercury beads from living/family room ductwork.

0630 ERRS completes merc-vac operation, and preps to heat and ventilate.

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cont. Screen Family room duct with Lumex = 3000 - 4000 ng/m³

0640 ERRS begin to heat home with two heaters (propane).

0650 Decision to dispose of bags #2, 3, 5 and the TV stand if it can't be cleaned with HgX

0745 Screen inside of home after heat cycle. Mercury level with Lumex = 7850, Homeowner stops by to talk to us, vent home

0800 Continue venting and heating home
> Family room = ~4000, Family room

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- heat duct = 6000 - 8000
- 0850 Screen home with Lumex
- Family Room BZ = 966
- Near bedrooms = 627
- Family room heat duct = 5660 - 8720
- 0905 Cool house and turn on Furnace
to measure vapors from the family
room heat duct. = 3500
- > Heat duct in Kitchen = 605
- 0920 Heat duct in family room = 4700 - 5500
- > Family room BZ = 1038
- > TV stand = 1000 - 3000
- > TV = ~ 4500
- > Clock mercury vials = 40,000+
- 0940 Begin screen of home with Lumex,
venting and heating occurring.
- > Bedroom 3 BZ = 970 Heat vent = 1168
- > Bedroom 2 BZ = 1054 Heat vent = 1212
- > Bedroom 1 BZ = 1148 Heat vent = 1350
- > Bathroom BZ = 1234 Heat vent = 1272
- > Kitchen BZ = 1370 Heat vent = 1303
- > Family room BZ = 2008 Heat vent = 5082
- > TV = 4200
- > Clock = 2414
- 0950 Discuss (osc) with homeowner the

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final measurements and personal
items returned.

1020 START, GPA, ER offsite.

MAB

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0750 START Beer onsite, waiting for Environmental Restoration (ER) weather 25°F, overcast, flurries, wind from southwest at 0-5 mph.

0810 ER onsite, begin setup of mercury vac. Calibrite Lumex (RFW 25827) R% = 13

0830 Begin screening residence home.
Family room = 2100 max (1750-2100) ng/m³
Kitchen = 1497

Family room heat duct = 1800-3500

> located one area near vent with high readings ~ 30,000 peak with sustained readings of 8000+, within some broken tile along the wall.

0855 Begin merc-vac operation, house is being vented. Re-vac spill location and down the heat duct. Periodically take photos down the vent. ER believes that they can see a small bead, continue merc-vac.
> Family room BZ during merc-vac operation = 1013 (room being vented)
> Merc-vac exhaust = 637

0920 Locate several large beads of mercury under trim on wall, where floor and wall meet. Begin to extract with pipet.

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too much mercury to pipet, have to remove trim from wall

0930 Remove trim from wall, many large and small beads of mercury located, begin merc vac operation.
> Install silicon caulking at bottom of wall to help seal ~~the~~ floor and wall, and seal duct and trim with Kilz latex primer.

1040 Seal portion of the floor concrete with Kilz latex primer. Family room BZ = 649 while room is being vented.

1050 Begin heat cycle with propane heaters

1110 Begin Lumex screening of home

Family room BZ = 462 ng/m³

Kitchen = 231

Bathroom = 186

Bed room 1 = 182

Bedroom 2 = 193

Bedroom 2 Closet floor = 183

Bedroom 3 = 173

Washing machine = 860

Family room heat vent = 1039

> measure taken during heat and vent cycle
> washing machine being cycled with HgX solution

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- 1225 Complete heat cycle in home,
continue venting. Family room BZ = 350
- 1245 Turn off ventilation and turn on the
furnace, merc levels begin to climb
and stabilize at $\sim 1200 \text{ ug/m}^3$
- > Spill location where mercury was vacced
earlier today reads as high as 35,000
 - > ER continue with merc-vac operation
down the heat duct and in the spill area.
- 1300 ER put another coat of primer paint
over spill area, wall trim, and heat vent
- > Area along floor and wall = 2500, previous
reading as high as 35,000+
 - > Heat duct air blowing out at 2000
- 1400 ER notices that TV stand is heavily
contaminated on the underside of the cabinet
with small mercury beads. Remove cabinet
and wipe down floor where the stand sat.
- > TV cabinet will be disposed of.
- 1430 Heat and vent home
- 1515 Continue heating and venting home.
Family room BZ = 350
VCR (bagged) = ~ 2000
- > Continue measuring elevated mercury
levels along wall, near heat duct

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- cont. Levels = 30,000+, recoat wall with
heavy coat of primer paint.
- 1545 Levels along wall lower after heavy
coat, ~ 11000 . Apply second heavy coat
of primer and reattach trim to
wall.
- 1555 Apply third heavy coat to seal
trim.
- 1600 Screen spill location near ductwork,
where previous elevated levels were
encountered. Merc reading = 350 - 650.
- 1605 Vent house, no heat.
- 1630 Screen inside of family room,
merc levels slowly ~~creep~~ creep upward
to near 1000, also room/house to sit
and stabilize before rescreening.
- 1645 Levels continue climbing in family
room, locate numerous area on carpet
at 3500+, also hotspots on the floor
at 10,000+.
- 1705 Family room BZ = 3134, decision to
remove all carpet and merc-vac entire
floor.
- 1720 HgX map the entire family room and
kitchen floor.

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1810 Begin screening family room after the house has been closed up for approx 15 minutes

Family room BZ = 530

> Screen for ~10 minutes, max average = 565 ng/L³

1840 Begin final screening of the house

Family Room BZ = 654

Kitchen BZ = 601

Bathroom BZ = 520

Bedroom 1 BZ = 501

Bedroom 2 BZ = 523

Bedroom 3 BZ = 516

Washing machine = 542

VCR/DVD = 1500, decide to place in garage to ventilate

1850 Begin tear-down in prep of demo, ER installs padding over the family room carpet tack-strip at the entryway to the room.

1900 Phone homeowner (734-904-4004) to discuss readings and final cleanup and disposal.

1905 Contact OSC Lippert to discuss and inform that START and ERPS are

about to depart the site

> 3 drums (steel) will remain of site until ER can arrange disposal. Drums contain mercury and mercury contaminated materials. Drums are sealed and have been located near the homeowners garage.

1910 Environmental Restoration and START off site.

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